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SPC AREA MARINE RESOURCES INFORMATION SERVICES AND SYSTEMS

Paper presented by the Secretariat

SUMMARY

Observations of the marine resources information needs of SPC by area fisheries officers and of other marine resources' specialists suggest that there is a need to upgrade both the information handling capabilities of national fisheries services and libraries, and the information collecting, organising and dissemination facilities of regional bodies. A meeting, to be held early in 1987, to discuss national and regional co-operation in marine resources information services, could include examination of detailed proposals for the development of regional marine resources information services and systems.

SPC AREA MARINE RESOURCES INFORMATION SERVICES AND SYSTEMS

BACKGROUND

1. The SPC area has a population of roughly 5 million people living in an area of 30 million square kilometres. More than ninety-eight percent of this area is ocean. Marine resources therefore are of paramount importance as sources of food and income to the governments and the people of the region. To several fishing nations from outside the region, the marine resources from within the area is also significant as a source of revenue.

2. The importance of marine resources has recently been emphasised by two authoritative studies:-

- (1) Ocean management: a regional perspective. (London: Commonwealth Secretariat, 1982); and
- (2) Fisheries research needs in the South Pacific. (Honiara: Forum Fisheries Agency and Halifax Canadian International Center for Ocean Development 1986).

Both studies stress that, although a wealth of information is available in and from the region's major marine research and development-oriented institutions, there are serious deficiencies in the collection, organisation and dissemination of this information. Both make recommendations for improving these processes at regional and national level. These recommendations add weight to previous repeated calls from fisheries officers, notably at the SPC Regional Technical Meetings on Fisheries held since 1950, from librarians (3, 4) and from SPC member governments (5) for improved information transfer.

3. The basic information needs of research, development and advisory workers in any field may be summarized as -

- (1) the need to know what has been done already in a particular field, whether in the worker's own country or elsewhere;
- (2) the need to keep up to date with relevant current developments;
- (3) the need for means of expression and communication of the results of one's own work.

4. If these needs were already being met, the mechanisms by which they were met would not necessarily be a primary concern for fisheries officers. However, the needs are not fully being met. As Fakahau and Shepard (2) point out, both regional and national information services are inadequate. On the national level "records of past activities are generally poor... Most of the earlier work has been inadequately reported or not reported... Few Fisheries Divisions (have) well run libraries... and useful material is buried in files or simply lost" ((2) pp. 72-73). As a result there is 're-invention of the wheel' because investigators are not familiar with work done elsewhere. Duplication [of research] occurs even within countries..." ((2) p.72).

SPC: ACTIVITIES AND CONSTRAINTS

5. At the regional level, the SPC is the largest disseminator of marine resources information, having produced since 1949 approximately 1100 marine-resource related articles including working papers and articles in the Fisheries Newsletter (6).

6. All Fisheries Technical Meeting and other SPC technical meeting working papers have been individually indexed since 1980 in the SPC library's multidisciplinary data base. This facilitated the production, in 1984, at the request of SPC member governments (5), of a catalogue of Pacific maritime resources literature (7). However, as the catalogue's preface points out: "Of the 298 entries, 121 are publications of the South Pacific Commission. This high proportion is due chiefly to the volume of SPC's productivity, but reflects also the difficulties of identifying and acquiring Pacific maritime resources publications of member governments and to a lesser extent those of other organisations active in the field. Systematic attempts are needed to identify, seek, record and preserve such publications. Without such attempts, Pacific maritime resources information will - like development information in other fields - remain under-recorded and often unknown, filed and forgotten in the office of origin." (7).

7. An estimated 950 pre-1980 SPC publications however, are not yet included in the data base, nor are at least a further 1000 unindexed non-SPC documents held by individual specialists. Searches for anything but recent literature are thus very time-consuming. As, often, only one copy of a document exists, heavy reproduction costs may be incurred in document supply in answer to enquiries.

8. In a multidisciplinary organisation, the library, publications, translation, printery and typing services cannot concentrate exclusively on production, organisation and dissemination of marine resources literature, nor can fisheries specialists devote more than a fraction of their time to information services. Time and financial constraints therefore limit both response to enquiries and the production, translation and distribution not only of the Fisheries Newsletter but also of handbooks, resource guides and other material designed to provide information on advances in research and development in the SPC area. A great deal of potentially valuable information is therefore not being communicated to those who may have the greatest need for it.

COMMUNICATION CONSTRAINTS

9. A further constraint common to most regional bodies and to most island member countries is the lack of high speed electronic communications services, coupled with very expensive and unreliable air services and less expensive but more unreliable sea services.

10. Use of new communication techniques could reduce the isolation of marine resource workers from each other and from the main centres of marine resources information within, and outside, the region. But the use of such communication techniques is impossible without the money to buy and service the equipment, and the manpower to run it. Secondly, it is essential that the format of records be standardised or that the co-operating bodies have the means for conversion from one format to another. Thirdly, in the case of communication between anglophone and francophone systems, SPC could both literally and symbolically provide the interface between the PIC-SPC data bases and French data-bases, i.e. between the two different languages and different methods of recording information.

11. Any plan for improving information services and systems should also therefore include some provision for upgrading communication services and for working towards compatibility of equipment and formats for bibliographic data transfer.

FUTURE PLANS

12. Most of the basic elements of a South Pacific marine resources information system already exist. In the SPC region, four regional bodies (SPC, PIC, FFA, SPREP) are already actively providing marine resources information. The region contains a number of productive universities, government departments and collaborating organisations and institutions such as FAO, ORSTOM, IFREMER, and it benefits from the co-operation of a wide range of extra-regional bodies such as ICLARM and the GBRMPA. There is therefore considerable support for the development of a regional marine resources information system based on the strengthening of existing services rather than on the creation of a separate marine resources information centre and network.

13. The International Development Research Centre has provided the Pacific Information Centre with some funds for a meeting of "regional and national institutions and organisations, to discuss co-operation in the area of fisheries information" (8). The Centre is actively seeking a co-sponsor for this meeting, which it hopes to hold in early 1987. This meeting could discuss, specifically, plans for co-operation in the further development of:

- a regional information network using electronic mail and computer conferencing
- a regional bibliographic data bank with improved coverage of marine resources documents
- the identification, location, cataloguing, copying, publication and supply of documents produced in the SPC area
- catalogues and specialist bibliographies of marine resources publications
- a referral service and panel of technical specialists to assess and abstract marine resources publications and to repackage the information, if necessary, for different interest groups

- provision of practical assistance and network support to focal points, fisheries services and libraries
- information management training opportunities for fisheries officers, library, publications and office staff
- compatibility of computing equipment and bibliographic input format.

14. Since 1950, at successive SPC Fisheries Technical Meetings participants have drawn attention - often, it might appear, in vain - to their information needs. For the first time since 1950 a meeting is to be held specifically to address these needs. The 1986 Fisheries Technical Meeting participants, by their statements of priority needs in information, and by their recommendations to the 1986 Fisheries Technical Meeting, could provide the necessary basis for practical short-term action and future planning of national and regional marine resources information services and systems.

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